

REMARKS

Claims 1-16 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-3, 7, and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over McMillen (U.S. Pat. No. 3,590,325). This rejection is respectfully traversed.

With respect to claim 1, McMillen fails to show, teach, or suggest a controller that compares the voltage to a threshold voltage at a first instance and generates an interrupt signal if the voltage is below the threshold voltage for a first period, wherein the first period is greater than or equal to a timed low voltage period. McMillen appears to be absent of any teaching or suggestion of a timed low voltage period.

It is a longstanding rule that to establish a prima facie case of obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 USPQ 143 (CCPA 1974), see MPEP §2143.03. Furthermore, when evaluating claims for obviousness under 35 U.S.C. §103, all of the limitations must be considered and given weight. *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), MPEP § 2144.03. Here, McMillen fails to disclose the limitation that **the first period is greater than or equal to a timed low voltage period**.

As described in an exemplary embodiment in FIG. 4 of the present application, a low voltage interrupter algorithm 80 determines whether a battery voltage is less than a

low voltage threshold in step 86. If the battery voltage is less than the low voltage threshold, the algorithm 80 does not initially disable the winch. Instead, the algorithm 80 determines whether the battery voltage is less than the low voltage threshold for a low voltage period in step 90. (See Paragraph [0022]). For example, system noise or other voltage transients may cause the voltage signal to fall below the low voltage threshold temporarily (i.e. less than the low voltage period). The low voltage timer ensures that the winch is not disabled as a result of temporary voltage drops.

As best understood by Applicants, McMillen does not disclose a **timed low voltage period**. Instead, McMillen appears to disclose actuating relays when a power supply voltage falls below a threshold regardless of any duration that the power supply voltage is below the threshold. For example, the Examiner relies on a voltage sensitive relay 13 to disclose Applicants' claimed controller. Column 3, Lines 23-28 recite:

During the operation of the voltage sensitive relay 13, when the voltage existing between terminals 10 and 12 of the DC power supply subsequently falls below a predetermined value, undervoltage relay 13, having been adjusted to sense this operating condition, will act to change the positions of relay contacts 13c, 13b, and 13a.

Applicants respectfully note that neither the above cited portion nor any other portion of McMillen appears to disclose that the voltage sensitive relay 13 is responsive to a timed low voltage period as Applicants' claim 1 recites. In other words, it appears that the voltage sensitive relay 13 reacts to the power supply voltage drop immediately and does not wait for a timed low voltage period to elapse prior to actuating the relays.

In view of the foregoing, Applicants respectfully submit that McMillen appears to be absent of any teaching or suggestion of a timed low voltage period. As such, claim 1, as well as its dependent claims, should be allowable for at least the above reasons.

Claim 10, as well as its dependent claims, should be allowable for at least similar reasons.

ALLOWABLE SUBJECT MATTER

The Examiner states that claims 4-6, 8, 9, and 11-16 would be allowable if rewritten in independent form. Applicants thank the Examiner for the allowable subject matter. Accordingly, Applicants have amended claims 4 and 12 to include the limitations of the base claim and any intervening claims. Therefore, claims 4 and 12, as well as their corresponding dependent claims, should now be in condition for allowance. Applicants elect to defer amending the remaining objected to claims until after the Examiner considers the above amendments and remarks.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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